

CLAIMS

1. A circuit for launching a modulation signal to an optical modulator, comprising:

5 an optical modulator for modulating an optical signal;

 a first stripline electrically connected to said optical modulator and directing a modulation RF signal to said optical modulator; and

 a second stripline electrically connected to said first stripline through said optical modulator,

10 characterized in that

 said first stripline includes a first electrical device and has a first characteristic impedance,

 said second stripline includes a second electrical device and has a second characteristic impedance,

15 said first characteristic impedance is equal to a characteristic impedance of a path through which said modulation RF signal is input into said first stripline, and

 a parallel-combined impedance of said first and second electrical devices is equal to said characteristic impedance of said path.

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2. The circuit as set forth in claim 1, wherein said second electrical device is comprised of at least two electrical devices, which are arranged at different locations from each other in a length-wise direction of said second stripline.

25 3. The circuit as set forth in claim 2, wherein said at least two electrical devices are arranged at opposite ends of said second stripline.

4. The circuit as set forth in any one of claims 1 to 3, wherein at least one of said first and second electrical devices is comprised of a resistor.

5. The circuit as set forth in claim 4, wherein said resistor is comprised of a thin-film resistor formed on an electrical conductor of said second stripline.

5 6. The circuit as set forth in any one of claims 1 to 5, wherein said second stripline has an electrical length equal to or smaller than a quarter of a wavelength associated with a maximum frequency of said modulation RF signal.

7. The circuit as set forth in any one of claims 1 to 6, wherein said second
10 characteristic impedance is different from said first characteristic impedance.

8. The circuit as set forth in any one of claims 1 to 7, wherein said first electrical device has an impedance different from said first characteristic impedance.

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9. An optical modulator module comprising:

a high-frequency input section for receiving a modulation RF signal by which an optical signal is modulated;

an optical input section for receiving a first optical signal;

20 a circuit for launching a modulation signal to an optical modulator, electrically connected to said high-frequency input section and optically connected to said optical input section, said circuit modulating said first optical signal into a second optical signal in accordance with said modulation RF signal, said circuit being comprised of a circuit defined in any one of claims 1 to 8, and

25 an optical output section optically connected to said circuit and outputting said second optical signal.

10. The optical modulator module as set forth in claim 9, wherein said optical input section is comprised of:

an optical input terminal through which an optical signal is input and output; and

a first lens,

and wherein

5 said optical input terminal is connected to a first optical fiber, receives said first optical signal through said first optical fiber, and outputs said first optical signal to said first lens, and

 said first lens receives said first optical signal and outputs said first optical signal to said optical modulator of said circuit.

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11. The optical modulator module as set forth in claim 9 or 10, wherein said optical output section is comprised of:

a second lens; and

15 an optical output terminal through which an optical signal is input and output,

and wherein

 said second lens receives said second optical signal from said optical modulator of said circuit, and outputs said second optical signal to said optical output terminal, and

20 said optical output terminal is connected to a second optical fiber, receives said second optical signal through said second lens, and outputs said second optical signal to said second optical fiber.

12. A method of launching a modulation signal to an optical modulator,
25 comprising:

 outputting a modulation RF signal to an optical modulator through a first stripline including a first electrical device and having a first characteristic impedance;

 modulating a first optical signal into a second optical signal in said optical

modulator in accordance with said modulation RF signal; and

outputting said modulation RF signal through said optical modulator to a second stripline including a second electrical device and having a second characteristic impedance,

5 wherein

said first characteristic impedance is equal to a characteristic impedance of a path through which said modulation RF signal is input into said first stripline, and

10 a parallel-combined impedance of said first and second electrical devices is equal to said characteristic impedance of said path.